

ABSTRACT

A process for producing a fine silver particle colloidal dispersion which can simply form conductive silver layers and antimicrobial coatings by screen printing or the like. The process is characterized by having a reaction step of allowing an aqueous silver nitrate solution to react with a mixed solution of an aqueous iron(II) sulfate solution and an aqueous sodium citrate solution to form an agglomerate of fine silver particles, a filtration step of filtering the resultant agglomerate of fine silver particles to obtain a cake of the agglomerate of fine silver particles, a dispersion step of adding pure water to the cake to obtain a first fine silver particle colloidal dispersion of a water system in which dispersion the fine silver particles have been dispersed in the pure water, and a concentration and washing step of concentrating and washing the first fine silver particle colloidal dispersion of a water system.